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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,102

07/14/2006

Francois Coeuret

Serie 6438

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AIR LIQUIDE

Intellectual Property

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HOUSTON, TX 77056

EXAMINER

TADESSE, YEWEBDAR T

ART UNIT

PAPER NUMBER

1792

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,102	Applicant(s) COEURET ET AL.	
	Examiner YEWEBDAR T. TADESSE	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/14/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, lines 1-2; the meets and bounds of the phrase “operation of crosslinking a coating, such as an ink or varnish coating” is unclear. For the purpose of examination, the phrase --operation of crosslinking a coating-- is assumed.

In claim 7, line 6; the noun “it” is unclear because it is unclear what applicants are intended to refer to. For the purpose of examination the phrase --the installation-- is assumed.

In claims 8-9, line 1 each; the noun “it” is unclear because it is unclear what applicants are intended to refer to. For the purpose of examination the phrase --the installation-- is assumed.

In claim 10, lines 1-4; the claim “The installation of claim 7, wherein said entry device includes at least the following five components, seen in succession by the running product to be treated: a channel, a first gas injection slot...” is unclear because claim 7 has already the limitation (see claim 7, lines 6-8) “ an entry device adjacent the chamber and comprising at least the following three components, seen in succession by the running product to be treated: a labyrinth system, means for injecting an inert gas

Art Unit: 1792

forming a gas knife,...". Does the entry device including five components (as claimed in claim 10) replace the entry device including three components or "not"?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Cocolios et al (US 6,458,330).

Cocolios et al discloses (see Fig 1) an installation in which in which an operation of crosslinking a coating, is carried out by ultraviolet radiation or by an electron beam, in the presence of a gas mixture with a controlled, the installation comprising a chamber using UV radiation or an electron beam; an entry device (inlet 5) and an exit device (outlet 8) adjacent the chamber (3), wherein the entry device including at least three components, seen in succession by running product to be treated, a labyrinth system(55), means for injecting an inert gas (slit 51) forming a gas knife and a channel (56); and wherein the exit device including at least three components, seen in succession by running product to be treated, a channel (86), means for injecting an inert gas (slit 81) forming a gas knife and means for creating a pressure drop (a labyrinth system 85 having a smooth profile), the distance between the smooth profile and the surface of the coating being less than the height of the channel (86).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7-9 and 11 rejected under 35 U.S.C. 103(a) as obvious over Turnbull et al (US 3,931,684) in view of Cocolios et al (US 6,458,330) .

Turnbull et al discloses (see Fig 5a and 22) an installation in which in which an operation of crosslinking a coating, is carried out by ultraviolet radiation or by an electron beam (see column 1, lines 16-19), in the presence of a gas mixture with a controlled, the installation comprising an entry device (entrance 14) and an exit device (15) adjacent the chamber (2), wherein the entry device including at least the following three components, a labyrinth system(18, where smooth profile is), means for injecting an inert gas (3) forming a gas knife and a channel (see Fig 5a for the passage wherein air flowing adjacent air diffuser 6), the distance between the smooth profile and the surface of the coating being less than the height of the channel. Although Turnbull et al teaches a curing chamber by radiation or electron beam, an installation comprising a chamber having UV radiation or a source of accelerated electrons and the three components (a labyrinth system, means for injection an inert gas and a channel) in succession by the running product as claimed are not taught in Turnbull et al. However, Cocolios et al discloses an installation having a curing chamber with UV radiation (see

Art Unit: 1792

claim 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a curing chamber with UV radiation or a source of accelerated electrons to cure the coated substrate. As to the claimed successive arrangement of the installation, Cocolios et al discloses an entry device (inlet 5) and an exit device (outlet 8) adjacent the chamber (3), wherein the entry device including at least three components, seen in succession by running product to be treated, a labyrinth system(55), means for injecting an inert gas (slit 51) forming a gas knife and a channel (56); and wherein the exit device including at least three components, seen in succession by running product to be treated, a channel (86), means for injecting an inert gas (slit 81) forming a gas knife and means for creating a pressure drop (a labyrinth system 85 having a smooth profile). It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the three components in Turnbull et al to improve installation of a chamber and to control over the treatment of gaseous atmosphere inside the chamber as taught by Cocolios et al (see column 2, lines 28-44).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YEWEBDAR T. TADESSE whose telephone number is (571)272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

Art Unit: 1792

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yewebdar T Tadesse/
Primary Examiner, Art Unit 1792